



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231 -
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/138,926	08/24/1998	FRANK C. CESARE	D-6362	4707

7590 12/31/2001

RAYMOND D. THOMPSON
UNIROYAL CHEMICAL COMPANY INC
WORLD HEADQUARTERS
MIDDLEBURY, CT 06749

EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 12/31/2001

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/138,926	Applicant(s) CESARE	
	Examiner Sandra M. Nolan	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Continued Prosecution Application

1. The request filed on November 13, 2001 (Paper No. 12) for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/138,926 is acceptable and a CPA has been established. An action on the CPA follows.

Claims

2. Claims 1-30 are pending.

Clean Copy of Claims

3. The Examiner notes, with appreciation, the clean copy of the claims provided in the response dated November 13, 2001 (Paper No. 13).

Rejections Withdrawn

4. The 35 USC 112 rejection of claims 29 and 30 for containing new matter, as recited in paragraph 4 of the Office Action dated April 10, 2001 (Paper No. 9) is withdrawn in view of Applicant's remarks in Paper No. 13.

5. The 35 USC 102 rejection of claims 1, 8, 9, and 29 as anticipated by JP-04004204A (abstract), as set out in paragraph 6 of Paper No. 9, is withdrawn in view of Applicant's remarks in Paper No. 13.

6. The 35 USC 103 rejection of claims 2-7, 15-28 and 30 as unpatentable over JP-040044204A in view of Gros (US 3,884,993) and Applicant's admission at page 1, lines 22-25 of the specification, as explained in paragraph 10 of Paper No. 9, is withdrawn in view of Applicant's remarks in Paper No. 13.

Rejection Maintained

7. The 35 USC 103 rejection of claims 10-14 as unpatentable over JP 04004204A in view of Applicant's admission at page 1, lines 22-25 of the specification, as set out in paragraph 9 of Paper No. 9, is maintained for the reasons of record.

New Rejection

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-9 and 15-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gros in view of JP 04004204A (abstract) and Applicant's admission.

Gros teaches low molecular weight ethylene/propylene/polyene terpolymers derived from Applicant's polyenes (col. 2, lines 51+). The terpolymers contain 10 to 90 mole % ethylene, 10 to 90 mole% alpha-olefin and 0.1 to 10 mole % polyene (col. 3, lines 23-25) and are blended with EPDM rubbers to improve processability (abstract). The terpolymers have molecular weights of from below 5,000 (col. 5, line 23) to 25, 000 (col. 5, line 9). Gros' compositions may contain 10 to 200 phr of fillers (col. 6, lines 38+) and may be used to make belts and hoses (col. 7, line 8).

Gros does not teach the use of aramid fibers and ethylene/alpha-olefin copolymers.

Art Unit: 1772

JP 04004204A teaches ethylene/alpha-olefin terpolymers containing a non-conjugated diene monomer and 30-75 mole % ethylene and 25-70 mole % olefin (first paragraph). The terpolymers have low molecular weights and can be blended with ethylene/alpha-olefin copolymers (second paragraph). The terpolymers are said to be dispersion agents/aids (title, use/advantage section).

Applicants have admitted, on page 1, lines 22-25 of the specification, that masterbatch compositions containing large amounts of aramid fibers are known.

All of the cited references/admissions deal with the production of polymeric compositions for use with fillers/reinforcers.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the aramid fibers of Applicant's admission along with the copolymers of the Japanese abstract and terpolymers in the compositions of Gros and to make belts and hoses therefrom.

The motivation to employ the copolymers of the Japanese abstract in the compositions of Gros is found in the title and use/advantage section of the abstract where the use of the polymer blends as dispersion aids is discussed. It is deemed desirable to facilitate the dispersion of fillers/reinforcers into the compositions of Gros in order to assure good distribution of the fillers/reinforcers therein.

The motivation to employ the aramid fibers discussed in Applicant's specification in the compositions of Gros is based on the well-known reinforcing properties of aramid fibers. It is deemed desirable to employ aramid fibers to reinforce compositions to be

Art Unit: 1772

use to make belts and hoses in order to make those belts and hoses stronger, so that their useful lives can be extended.

Response to Arguments

10. Applicant's arguments with respect to claims 1-9 and 15-30 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed in Paper No. 13 with respect to claims 10-14 have been fully considered but they are not persuasive.

On pages 5-7 of Paper No. 13, Applicant argues that the admission should not be used in the section 103 rejection.

However, the examiner is free to use statements made by Applicants as admissions in lieu of references when those statements are material to the patentability of the claims rejected. Here, the conventionality of aramid fibers in polymer compositions is material to a discussion of the patentability of claims 10-14.

On page 7, Applicant argues that Gros does not disclose low molecular weight polymers.

However, Gros teaches "low molecular weight" rubbers in its abstract.

On pages 8 and 9, applicant argues the Gros does not teach the ¹⁴ ~~use~~ of ethylene contents of 67% or more in the Gros terpolymers.

However, Applicant has failed to show, by convincing objective evidence, that the use of terpolymers containing the claimed amounts of ethylene produce unexpected results when used in the compositions and articles suggested by the combined references/admission.

Art Unit: 1772

Conclusion

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



S. M. Nolan
Patent Examiner
Technology Center 1700

SMN/smn
December 28, 2001
09138926(14)